



**10000GPD
Condensate
Water System
Manual**

Operation Instruction Catalogue

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Customer Support

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1.Main Technology Parameters

No.	Model	Features	Total Power
1	TCA-10000-COND	Applicable Voltage 208V	0.75KW

Rated working pressure	0.3 MPa
Raw water pressure&flow	≥ 0.15 MPa, ≥ 7 GPM
Outlet water capacity	≥ 7 GPM
Raw water pump motor power	0.75 KW, 208V 3P 60HZ

2.Equipment location

- ①The equipment is required to be placed on the flat ground, and there should be more than 50cm channel around the equipment for operation and maintenance.
- ②Do not place the equipment outdoor so as not to accelerate the aging of its mechanical parts.
- ③Connection pipes should be UPVC or stainless steel to prevent rust contamination.
- ④Check whether the fixed locking clips and screws are loose.
- ⑤All switches on the electrical box should be turned off before power on.
- ⑥Confirm the motor running direction is correct.

3.Equipment Installation

3.1 Loading filter media:(Quartz sand, Activated carbon and KDF55)

Pour a small amount of water (about 30cm high) into the tanks first before loading the filter media,the height of media in the tanks shall not exceed three quarters of the tanks.Generally, two-thirds of the height is good.

Remark:

- ①When loading quartz sand, fill in the order of large particles to small particles.
- ②When loading the activated carbon tank,please fill with coarse sand first to cover the water distributor in the tank, and then pour in the activated carbon.

3.2 Connect water pipe

- ①Connect the raw water inlet port in front of the feed pump with the water source;
- ②The filter tanks discharge port is connected to the sewer for direct discharge.
- ③The Product port connect to product tank.

3.3 Connect the circuit:

- ① Connect the liquid level gauges of raw water tank and product tank to the electric control box according to the circuit diagram;
- ② Connect the main wire of the distribution box to the power supply. For the sake of safety, connect it reliably with the grounding wire at the grounding screw of the electric control box. Then plug the dosing pump and automatic control valve power cord into the socket.

4. Preparation before startup

4.1 Pipeline and electric control connection

Confirm that the equipment has been connected with peripheral equipment (such as water pump, water tank, electric control, etc.) according to the process flow chart first.

4.2 Filter tanks Cleaning

Full fill the raw water tank first, Turn the "Auto/Stop/Manual" knob of the control box to the Stop state, and fully open the feed pump outlet regulating valve.

Adjust the quartz sand filter control valve to **BACKWASH** state, Then turn the feed pump switch to **Manual mode** and start it, adjust the pre-treatment water inlet pressure to be greater than 0.2MPa.

Only the above actions are completed, the following actions can be carried out!

① Quartz sand filter cleaning

The filter media should be thoroughly cleaned before start. The operation steps are as follows:

● Backwash quartz sand filter:

Adjust the control valve of quartz sand filter to **BACKWASH**, Set the activated carbon filter to **SERVICE**, then perform the backwash for the quartz sand filter for around 10-20mins until the effluent becomes light or colorless.

● Forward wash quartz sand filter:

While completed backwash for quartz sand filter, reset the quartz sand filter control valve to **"FAST RINSE"**, keep the activated carbon filter to the **"SERVICE"**, then forward wash the sand filter for around 10-20mins until the effluent becomes light or colorless.

② Activated carbon filter cleaning

Activated carbon filter cleaning steps are as above.

● Activated carbon filter backwash:

Adjust the control valve of activated carbon filter to **"BACKWASH"**, while adjust the quartz sand filter to the **"SERVICE"**, then backwash the carbon filter for 10-20mins until the drainage is generally black to light or colorless.

● Activated carbon filter Forward wash:

Reset the control valve of activated carbon filter to “**FAST RINSE**”. Keep the quartz sand filter to the “**SERVICE**”. Then forward wash the carbon filter for 10-20mins until the drainage is generally black to light or colorless.

③ Cycle cleaning

When the filters are all cleaned, turn the "**Auto / Stop / Manual**" knob on the panel of the electric control box to **stop position**. Stop it for 4-5 hours, and then wash them repeatedly (about 2 days) for several times before formal use.

Note: Only the two pre-treatment filters are all cleaned, they can be adjusted to the **SERVICE** stage to enter the normal operation.

For the adjustment method of the control valve, please refer to the manual of Runxin automatic control valve.

5. System Auto Operation

5.1 Preparation before automatic startup

- ① Confirm raw water tank liquid level meets the starting requirements.
- ② Check the feed pump is normal. And check the meters are normal.
- ③ Confirm the opening and closing state of each manual valve meets the system automatic start-stop requirements. Generally, The inlet and outlet valve of water tanks and pump, as well as water produced valve should be normally open.

5.2 System Startup

- ① Turn all control buttons on the control panel to automatic.
- ② When the system runs automatically, check its operating status and parameters are normal. If there is a fault, it should be eliminated in time.
- ③ After putting all the devices into operation, please check the equipment actual operation conditions. Such as the running states of the pumps, whether the flow, pressure and other parameters of each device meet the technical requirements.
- ④ The operating parameters and any possible malfunction of the equipment should be Recorded.

5.3 System Shutdown

The system will be shut down depending on the water level of each water tank (The system shuts down when the water level of raw water tank is low or product water tank full);

